

Australian Standard[®]

Methods for sampling and testing aggregates Method 29: Accelerated soundness index by reflux

METHOD

1 SCOPE

This Standard sets out the method used to estimate the durability of a basaltic source rock or product by providing a measure of the amount of physical degradation induced in the sample by immersion in boiling ethylene glycol. The results of this test are used for the classification of basaltic aggregates used in road base or road surface.

NOTE: This method is appropriate to those basaltic rocks that contain clays of the smectite/chlorite series as an alteration or weathering product.

WARNING: SOME OF THE CHEMICALS OR PROCEDURES SPECIFIED IN THIS STANDARD COULD LEAD TO A HAZARDOUS SITUATION IF CORRECT SAFETY MEASURES ARE NOT FOLLOWED. PERSONS USING THIS AUSTRALIAN STANDARD MUST BE FAMILIAR WITH NORMAL LABORATORY PRACTICE. THIS STANDARD DOES NOT ADDRESS THE SAFETY PROBLEMS, IF ANY, ASSOCIATED WITH ITS USE. IT IS THE RESPONSIBILITY OF THE LEGAL ENTITY USING THIS STANDARD TO ESTABLISH APPROPRIATE SAFETY AND HEALTH PRACTICES, TO ENSURE COMPLIANCE WITH ANY NATIONAL, STATE OR LOCAL REGULATORY REQUIREMENTS, AND TO INSTRUCT IN, AND ENFORCE COMPLIANCE OF THE SAFETY AND HEALTH PRACTICES.

2 REFERENCES

The following are the documents referred to in this Standard:

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- 1141 Method of sampling and testing aggregates
- 1141.3.1 Method 3.1: Sampling—Aggregates
- 1141.3.2 Method 3.2: Sampling—Rock spalls and boulders
- 1141.2 Method 2: Basic testing equipment
- 1152 Specification for test sieves
- 2143 Safety in laboratories
- 224.8 Part 8: Fume cupboards

3 SAFETY PRECAUTIONS

Procedures using ethylene glycol at temperatures above ambient shall be carried out in a fume cupboard. Ethylene glycol is a skin irritant. Ingestion of the liquid or inhalation of the vapour from hot liquid constitutes a health hazard.

NOTE: Rubber gloves should be worn when handling test samples that have been immersed in ethylene glycol. Appropriate documentation should be consulted as to safety precautions.